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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.        | CONFIRMATION NO.       |
|---|-------------|----------------------|----------------------------|------------------------|
| 10/594,426  | 09/26/2006  | Hajime Adachi        | 051144-0120                | 2944                   |
| 23428 7590 07/16/2010<br>FOLEY AND LARDNER LLP<br>SUITE 500<br>3000 K STREET NW<br>WASHINGTON, DC 20007 |             |                      | EXAMINER<br>WELCH, DAVID T |                        |
|   |             |                      | ART UNIT<br>2628           | PAPER NUMBER           |
|   |             |                      | MAIL DATE<br>07/16/2010    | DELIVERY MODE<br>PAPER |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/594,426

**Applicant(s)**

ADACHI ET AL.

**Examiner**

DAVID T. WELCH

**Art Unit**

2628

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 April 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 13, 19, 25 and 27-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 13, 19, 25 and 27-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB-06)  
Paper No(s)/Mail Date 5/28/2010
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Response to Amendments*

1. Applicant's amendments filed on April 26, 2010 have been entered. Claims 13, 19, 25, and 27-38 have been amended. No further claims have been canceled. No further claims have been added. Claims 13, 19, 25, and 27-38 are still pending in this application, with claims 27, 31, and 35 being independent.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 13, 19, 25, and 27-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakamoto et al. (U.S. Patent Application Publication No. 2002/0070934), referred herein as Sakamoto, in view of Senda et al. (U.S. Patent Application Publication No. 2004/0176908), referred herein as Senda.

Regarding claim 27, Sakamoto teaches a three-dimensional (3D) road object creating device, comprising: a cross-section data extracting unit that extracts cross-section data that includes at least width and height of a 3D object representing a road to be drawn (page 8, paragraph 184; page 12, paragraph 214; page 13, paragraph 220, lines 1-10; page 14, paragraphs 258, 261, and 265); a length information extracting unit

that extracts, from a road network database that stores information on length of the 3D object representing the road, link-length information necessary for drawing the 3D object representing the road (page 10, paragraph 193, lines 1-9; page 13, paragraph 220, lines 1-10; page 14, paragraphs 258 and 260); and a creating unit that creates, based on the cross-section data and the link-length information, the 3D object representing the road having a size represented by a length specified by the link-length information (page 8, paragraph 182, lines 19-23; page 9, paragraph 185, lines 1-5; page 13, paragraph 220, the last 9 lines; page 14, paragraphs 268 and 300). Sakamoto does not explicitly teach that the 3D object has a size obtained by extending the cross-section data in a longitudinal direction of the 3D object by the specified length. Senda teaches a three-dimensional road object creating device comprising a cross-section data extracting unit that extracts cross-section data of a 3D road object to be drawn, and a length information extracting unit that extracts, from a road network database, length information necessary for drawing the 3D road object (page 3, paragraph 48, lines 1-8; paragraph 49; paragraph 50, lines 1-8); and a creating unit that creates, based on the cross-section data and the length information, the 3D road object having a size obtained by extending the cross-section data in a longitudinal direction of the 3D road object by a length specified by the length information (page 3, paragraph 52, lines 1-14; page 5, paragraph 67; paragraph 68, lines 1-5; paragraph 72, lines 1-13). It would have been obvious to utilize this 3D road object creation to construct the 3D objects representing a road in the invention disclosed by Sakamoto, because as was known in the art at the time of the invention, and illustrated by Senda, this 3D road object construction is a fast

and accurate way to generate the 3D objects, thereby increasing the speed and efficiency with which the objects can be drawn while the map in which the 3D objects are generated is navigated. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine the 3D road object creation disclosed by Senda with the invention disclosed by Sakamoto.

Regarding claim 28, Sakamoto in view of Senda teaches the 3D road object creating device according to claim 27, and further teaches the device, wherein the 3D object representing the road corresponds to at least a part of road data stored in the road network database (Sakamoto, page 8, paragraph 182, lines 9-18; page 10, paragraph 196, lines 22-28; Senda, page 3, paragraph 49; page 5, paragraph 72, lines 1-13).

Regarding claim 29, Sakamoto in view of Senda teaches the 3D road object creating device according to claim 28, and further teaches the device, further comprising a selecting unit that selects, based on identification information included in the road data, cross-section data necessary for drawing the 3D object representing the road from among various types of cross-section data for different cross-sections (Sakamoto, figure 5; page 9, paragraph 189, the last 4 lines; paragraph 192, lines 5-9 and 24-29; page 10, paragraph 193, lines 1-9; Senda, page 3, paragraph 54, lines 1-8; page 5, paragraph 72).

Regarding claim 30, Sakamoto in view of Senda teaches the 3D road object creating device according to claim 27, and further teaches the device, wherein the link-length information is link-length information included in the road network database for

drawing the 3D object representing the road, and the creating unit creates the 3D object representing the road by extending the cross-section data by a length specified by the link-length information (Senda, page 3, paragraph 52, lines 1-14; page 5, paragraph 67; paragraph 68, lines 1-5; paragraph 72, lines 1-13; Sakamoto, page 9, paragraph 189, the last 5 lines; page 10, paragraph 193, lines 1-7).

Regarding claim 13, Sakamoto in view of Senda teaches the 3D road object creating device according to claim 27, and further teaches the device, further comprising a texture extracting unit that extracts texture information including information on a texture drawn on an arbitrary surface of the 3D object representing the road, information on a drawing cycle of the texture, and information on a representative color of the arbitrary surface, from the 3D object representing the road, wherein the creating unit creates the 3D object representing the road based on the texture information (Senda, page 3, paragraph 50, lines 8-11; paragraph 53, lines 1-5; paragraph 54; page 5, paragraphs 72; paragraph 78, lines 1-10; page 6, paragraph 81, lines 3-4; Sakamoto, page 14, paragraph 257).

Regarding claims 31-34 and 19, the limitations of these claims correspond to the limitations of claims 27-30 and 13, respectively; thus they are rejected on similar grounds as their corresponding claims.

Regarding claims 35-38 and 25, the limitations of these claims correspond to the limitations of claims 27-30 and 13, respectively; thus they are rejected on similar grounds as their corresponding claims.

***Response to Arguments***

4. Applicant's arguments, see page 7, filed April 26, 2010, with respect to the 101 rejections have been fully considered and are persuasive. The amendments to the claims are sufficient to overcome the 101 rejection, as the amended claims are directed to statutory subject matter; thus the 101 rejections of these claims have been withdrawn.
5. Applicant's arguments filed September 21, 2009, with respect to the 102 and 103 rejections of the claims, have been fully considered, but are moot in view of the new ground(s) of rejection.

***Conclusion***

6. The following prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Shimoura et al. (U.S. Patent No. 5,613,055); Method of and apparatus for producing an animation having a series of road drawings to be watched from a driver's seat of a vehicle.

Inoue (U.S. Patent No. 6,142,871); Apparatus, method and recorded programmed medium for simulating driving using mirrors displayed in a game space.

Okude et al. (U.S. Patent No. 6,157,342); Navigation device.

Okude et al. (U.S. Patent No. 6,341,254); Map displaying method and apparatus, and navigation system having the map displaying apparatus.

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **DAVID T. WELCH** whose telephone number is (571)270-5364. The examiner can normally be reached on Monday-Thursday, 8:00-5:30 EST, and alternate Fridays, 8:00-4:30 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Xiao Wu can be reached on (571)272-7761. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/dtw/

/XIAO M. WU/  
Supervisory Patent Examiner, Art Unit 2628